

Claims:-

1. An air permeable panel for an intermediate cladding
5 layer having filtering characteristics, said panel comprising:-
a plurality of projections interconnected in a lattice configuration, said projections being arranged to face in a common direction for engagement in use with said intermediate
10 cladding layer.
2. An air permeable panel according to claim 1, wherein the projections have a tip portion and a base portion and are interconnected at or adjacent their respective base portions.
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3. An air permeable panel according to claim 1 or 2, wherein said projections have a pyramidal form.
4. An air permeable panel according to any one of claims 1
20 to 3, wherein the projections are provided as a hollowed element.
5. An air permeable panel according to any one of claims 1 to 4, wherein the projections are interconnected at base
25 portions, with apertures defined therebetween.
6. An air permeable panel according to any preceding claim, wherein the projections are configured to restrict penetration thereof into the intermediate cladding layer.
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7. An air permeable panel according to claim 6, wherein the cross-sectional area of each projection increases along its longitudinal axis away from their tip portion.

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8. A building cladding system incorporating an air permeable panel according to any preceding claim; wherein a panel is provided on one or both faces of said intermediate cladding layer.
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9. A building cladding system according to claim 8, further comprising a wall member, adjacent the panel and coupled thereto.
- 10 10. A building cladding system according to claim 9, comprising internal and external wall members within which the panel and intermediate cladding layer are provided.
11. A building cladding system according to claim 9 or 10,
15 further comprising one or more edge members, configured to interconnect adjacent intermediate cladding layers.
12. A building cladding system according to claim 11, wherein the edge members have limbs in a cross formation, the
20 limbs being inclined similarly to surfaces of the projections on adjacent panels for abutment thereto.
13. An air permeable panel for an intermediate cladding layer having filtering characteristics, the panel
25 comprising:-
a plurality of hollowed elements interconnected in a planar lattice arrangement, said hollowed elements facing in a common direction and being interspersed with apertures.
- 30 14. A panel according to claim 13, wherein the hollowed elements are interconnected at their peripheries to define said apertures therebetween.

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15. A panel according to claim 13 or 14, wherein the hollowed elements have a pointed outer surface for engaging said intermediate cladding layer.

5 16. A panel according to any one of claims 13 to 15, wherein each hollowed element has a pyramidal form.

17. A panel according to any one of claims 13 to 16, wherein the intermediate layer has a graduated filtering profile.

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18. A panel according to claim 17, wherein the filtering characteristics of the intermediate layer are such as to trap relatively large particles towards an outer surface thereof and to trap relatively smaller particles towards the inner
15 surface thereof.

19. A panel according to any one of claims 13 to 18, wherein the intermediate layer has thermal and/or sound insulating properties.

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20. A panel according to any one of claims 13 to 19, wherein intermediate layer comprises one or more of:- mineral wool, wet-blown cellulose and glass wool.

25 21. A panel according to any one of claims 13 to 20, wherein the intermediate layer is provided in the form of one or more of:- membranes, fibres, pulp or cellular based (foam or sponge) materials, or modified aerated concrete.

30 22. A panel according to any one of claims 13 to 21, wherein the cladding material comprises filter materials for one or more of:- particulate emissions, gas pollutants, chemical agents and biological agents.

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23. A panel according to any one of claims 13 to 22, wherein the cladding material is provided in the form of panel units.
24. A panel according to claim 23, wherein the panel units
5 are provided in modular format.
25. A panel according to any one of claims 13 to 24, wherein the intermediate layer is formed of a plurality of one or more separate filter layers, of different filtering
10 characteristics.
26. A panel according to claim 25, wherein each filter layer of the intermediate layer is selected to extract a specified range of particle sizes, gaseous pollutants, chemical
15 pollutants, and/or biological agents.
27. A panel according to claim 26, wherein the separate filter layers of the intermediate layer together define substantially the complete filter spectrum of particulate and
20 other pollution.
28. A panel according to any one of claims 25 to 27, wherein the or each filter layer of the intermediate layer is independently replaceable.
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29. A panel according to any one of claims 25 to 28, wherein the or each filter layer of the intermediate layer comprises one or more disposable filter elements.
- 30 30. A panel according to any one of claims 13 to 29, wherein the panel is pressed from a single sheet.
31. A panel according to any one of claims 13 to 29, wherein the panel is moulded from a plastics material.

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32. A panel according to any one of claims 13 to 31, wherein the panel is formed of fire retardant materials.

33. A panel according to any one of claims 13 to 32, wherein 5 in use with the hollowed elements at or adjacent the intermediate layer, the apertures present an opening of expanding volume onto the intermediate layer.

34. An air permeable panel substantially as hereinbefore 10 described with reference to the accompanying drawings.

35. A building cladding system substantially as hereinbefore described with reference to the accompanying drawings.